



6/11/02 PA 9
Box 369

Docket No.: 20731 US (C38435/120940)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Akira ASAKURA et al.)
Serial No.: 09/938,035) Examiner: Not Yet Assigned
Filed: August 23, 2001) Art Unit: 1651
For: **MICROBIAL PROCESS FOR**
PRODUCING L-ASCORBIC ACID, D-
ERYTHORBIC ACID, AND SALTS
THEREOF)

RECEIVED

AUG 20 2002

TECH CENTER 1600/2900

New York, NY
August 12, 2002

**RESPONSE TO NOTICE TO COMPLY WITH REQUIREMENTS
FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE
SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Commissioner for Patents
U.S. Patent and Trademark Office
BOX SEQUENCE
P.O. Box 2327
Arlington, VA 22202

Sir:

This is in response to the NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES ("Notice") mailed June 11, 2002, which set a two-month shortened statutory period to respond. The due date for reply to the Notice is August 12, 2002 because August 11, 2002 fell on a Sunday. 35 U.S.C. § 21(b); 37 C.F.R. § 1.7 and 1.8. Accordingly, this response is filed timely upon mailing with an executed Certificate of Mailing on or before August 12, 2002. (37 C.F.R. § 1.8). It is not

believed that this response occasions any fee, but should there be any fee, please charge the same to Deposit Account No. 02-4467. A duplicate copy of this sheet is enclosed.

Please amend the application as follows:

IN THE SPECIFICATION

Please cancel the Sequence Listing on pages 41-43 of the original application and renumber the specification accordingly. Please enter the substitute Sequence Listing set forth in Exhibit A on the next page after the section entitled Abstract.

REMARKS

In the Notice, it is asserted that the content of the computer readable form ("CRF") of the Sequence Listing submitted with the response of May 7, 2002 does not comply with the requirements of 37 C.F.R. §§ 1.821 through 1.825. (See Notice at page 1). In particular, it is asserted that the use of the term "n" was detected in the Sequence Listing and that such term must be defined in the <220> and <223> sections of the Sequence Listing. (See "Raw Sequence Listing Error Summary" on page 4 of the Notice). A copy of the Notice is attached hereto as Exhibit B.

In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

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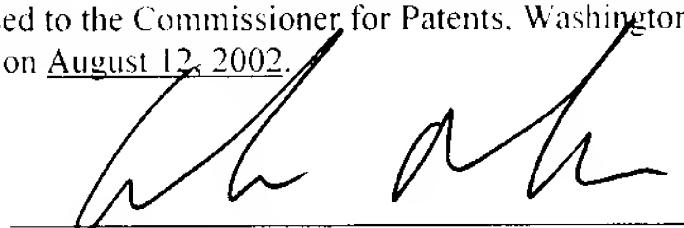
In response to the Notice, a paper copy and a CRF of a substitute Sequence Listing are attached hereto, respectively, as Exhibits A and C.

Pursuant to 37 CFR § 1.821(f), undersigned counsel hereby represents that, upon information and belief, the content of the paper and computer readable Sequence Listings enclosed herewith are the same, and no new matter has been added.

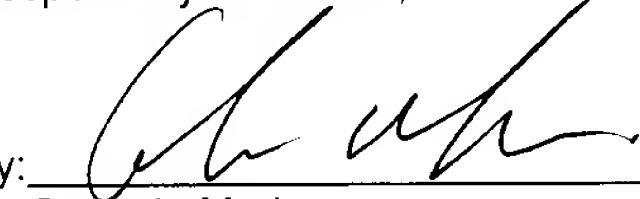
It is believed that the Sequence Listing presented herewith places the captioned application into compliance with the requirements set forth in 37 CFR § 1.821. Entry of the Sequence Listing is respectfully solicited.

If the Examiner wishes to discuss any part of this submission, please contact the undersigned at the number indicated.

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to the Commissioner for Patents, Washington, D.C. 20231, on August 12, 2002.


Gonzalo Merino

Respectfully submitted,

By: 
Gonzalo Merino
Registration No. 51,192
BRYAN CAVE LLP
245 Park Avenue
New York, New York 10062
(212) 692-1800

PART I - ATTORNEY/APPLICANT COPY

[Signature]
A copy of this notice **MUST** be returned with the reply.

- For Rules Interpretation, call (703) 308-4216
- To Purchase PatentIn Software, call (703) 306-2600
- For PatentIn Software Help, call (703) 306-4119 or e-mail at patin21help@uspto.gov or patin3help@uspto.gov

For questions regarding compliance to these requirements, please contact:

- A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked-up "Raw Sequence Listing." A applicant must provide a substitute computer readable form (CRF) copy of the "Sequence Listing" and a statement that the content of the sequence listing information recorded in computer readable form is identical to the written (on paper or compact disc) sequence listing and, where applicable, includes no new matter, as required by 37 CFR 1.821(e), 1.821(f), 1.821(g), 1.825(b), or 1.825(d).
- A copy of the "Sequence Listing" in computer readable form may be obtained under the provisions of 37 CFR 1.136(a). Below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Applicant is given **TWO MONTHS FROM THE DATE OF THIS NOTICE** within which to file the items indicated below to avoid abandonment. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Date Mailed: 06/11/2002

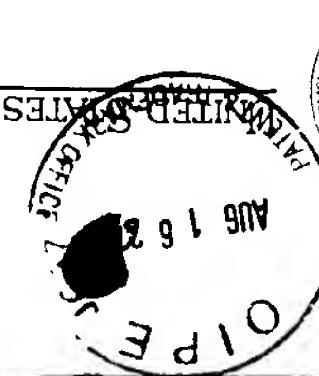
Stephen M. Haracz, Esq.
Bryan Cave, LLP
245 Park Avenue
New York, NY 10167-0034

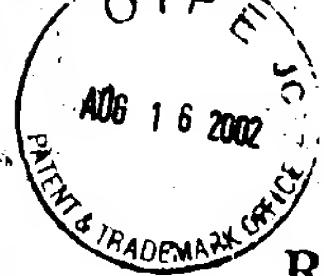
CONFIRMATION NO. 1662
FOR MULTITIES LETTER
09/938,035
Akira Asakura
20731 US (C38435/120940)
08/23/2001
FIRST NAMED APPLICANT
ATTORNEY DOCKET NUMBER
www.uspto.gov

UNITED STATES PATENT AND TRADEMARK OFFICE
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PATENT AND TRADEMARK OFFICE
U.S. GOVERNMENT PRINTING OFFICE: 2001 16-200-1662

Page 1 of 1

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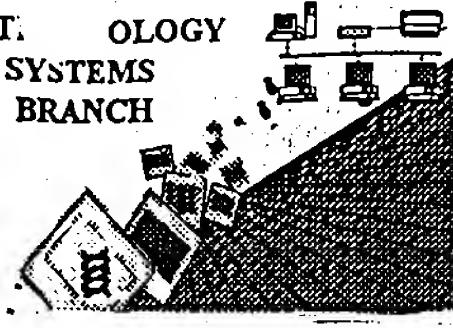
AUG 20 2002

BIOT. OLOGY
SYSTEMS
BRANCH

5112

RAW SEQUENCE LISTING
ERROR REPORT

TECH CENTER 1600/2900



The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/938,035A
Source: OIPE
Date Processed by STIC: 5-23-02

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 3.1 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>), EFS Submission User Manual - ePAVE)
2. U.S. Postal Service: U.S. Patent and Trademark Office, Box Sequence, P.O. Box 2327, Arlington, VA 22202
3. Hand Carry directly to:
U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7th Floor, Examiner Name,
Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202
Or
U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two,
2011 South Clark Place, Arlington, VA 22202
4. Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office,
Box Sequence, Room 1B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 01/29/2002



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Does Not Comply
Raw Sequence Listing Error Summary
~~Corrected Diskette Needed~~ TECH CENTER 1600/2900

ERROR DETECTED SUGGESTED CORRECTION

SERIAL NUMBER: 09/938,035A

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleic acids The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line not exceed 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Acid Numbering The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use space characters, instead.
- 4 Non-ASCII The submitted file was not saved in ASCII(DOS) text, as required by the Sequence Rules. Please ensure your subsequent submission is saved in ASCII text.
- 5 Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. Per Sequence Rules, each n or Xaa can only represent a single residue. Please present the maximum number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.
- 7 Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.
- 8 Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213> Response Per 1.823 of Sequence Rules, the only valid <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is required when <213> response is Unknown or is Artificial Sequence
- 11 Use of <220> Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses.
Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32) (Sec. 1.823 of Sequence Rules)
- 12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.



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Does Not Comply
Corrected Diskette Needed

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OIPE

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002

TIME: 18:06:05

Input Set : A:\seq list-20731,RocheVit.txt

Output Set: N:\CRF3\05232002\I938035A.raw

3 <110> APPLICANT: Roche Vitamins AG
 5 <120> TITLE OF INVENTION: Microbial process for producing L-ascorbic acid and
 6 D-erythorbic acid
 8 <130> FILE REFERENCE: Alicyclobacillus NA20, 21, FJ21 16S nuc
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/938,035A
 C--> 11 <141> CURRENT FILING DATE: 2001-08-23
 13 <150> PRIOR APPLICATION NUMBER: EP Application No. 00118059.5
 14 <151> PRIOR FILING DATE: 2000-08-23
 16 <160> NUMBER OF SEQ ID NOS: 3
 18 <170> SOFTWARE: PatentIn Ver. 2.1

ERRORED SEQUENCES

98 <210> SEQ ID NO: 3
 99 <211> LENGTH: 1495
 100 <212> TYPE: DNA
 101 <213> ORGANISM: Alicyclobacillus sp.
 103 <220> FEATURE:
 104 <221> NAME/KEY: rRNA
 105 <222> LOCATION: (1)..(1495)
 106 <223> OTHER INFORMATION: FJ-21 Partial 16SrRNA gene sequence
 108 <400> SEQUENCE: 3
 109 aggacgaacg ctggcggcggt gcctaataca tgcaagtcga gcggaccgtct tctgaggta 60
 110 gcggcggacg ggtgaggaac acgtggtaa tctgccttgc agaccggaaat aacgcccgg 120
 111 aacggggcgat aatgccggat acgcccggcgaa ggaggcatct tcttgccgggg aaaggccccg 180
 W--> 112 ttggggccgt gagagaggag cccgcggcgcc attagctngt tgccgggtta acggcccccacc 240
 113 aaggcgacga tgcgttagccg acctgagagg gtgaccggcc acactggac tgagacacgg 300
 114 cccagactcc tacgggagggc agcagtaggg aatcttccgc aatggggcgca agcctgacgg 360
 115 agcaacgcccgt cgtgagcgaa gaaggccttc gggttgtaaa gctctgtgc tcggggagag 420
 116 cggcatgggg agtgtggaaagc cccatgcgag acggtagccgatgtgaggaaccccgttaac 480
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 118 aaagggtgcg taggcggtcg agcaagtctg gagtgaaatgtccatggctca accatggat 600
 119 ggctctggaa actgcttgac ttgagtgctg gagaggcaag gggattcca cgtgtacgg 660
 120 taaaaatgcgt agagatgtgg aggaatacca gtggcgaaagg cgcccttgctg gacagtgtact 720
 121 gacgctgagg cacaaaagcg tggggagcaa acaggattag ataccctgtt agtccacgcc 780
 122 gtaaacgtatgt agtgcttaggt gttggggggca cacaccccgatgccaagg aacccaataaa 840
 123 gcactccgccc tggggagtac ggtcgcaaga ctgaaaactca aaggaattga cggggggcccg 900
 124 cacaaggcgtt ggagcatgtg gtttaattcg aagcaacgcg aagaacctta ccagggttt 960
 125 acatccctct gacgggtgca gagatgcacc ttcccttcgg ggcagaggag acaggtggtg 1020
 126 catggttgtc gtcagctgt gtctgtgat gttgggttca gtcccgcaac gagcgcaacc 1080
 W--> 127 cttgacactgt gttaccagcg cgnatggcg gggactcaca ggtgactgcc ggcgttaagtc 1140
 128 ggaggaaggc gggatgacg tcaaataatc atgccccctga tgtcctggc tacacacgtg 1200

see item #9
on ERROR SUMMARY
SHEET

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002
TIME: 18:06:05

Input Set : A:\seq list-20731,RocheVit.txt
Output Set: N:\CRF3\05232002\I938035A.raw

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130 ctcgtagttc ggattgcagg ctgcaactcg cctgcataaa gccggaattt ctagtaatcg 1320
131 cggatcagca tgccgcggtg aatacgttcc cgggccttgt acacaccgccc cgtcacaccca 1380
132 cgagagtccgg caacacccga agtcggtgag gtaaccccgaa aaggggagcc agccgcccga 1440
133 ggtggggtcg atgattgggg tgaagtcgta acaaggtac cgtaccggaa ggtgc 1495

E--> 136 1
E--> 139 1

remove extra material at end
of file

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/938,035A

DATE: 05/23/2002

TIME: 18:06:06

Input Set : A:\seq list-20731,RocheVit.txt

Output Set: N:\CRF3\05232002\I938035A.raw

L:10 M:270 C: Current Application Number differs, Replaced Application Number
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:34 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:180
L:47 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:960
L:54 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:1380
L:73 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:180
L:112 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:180
L:127 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:1080
L:136 M:254 E: No. of Bases conflict, this line has no nucleotides.
M:254 Repeated in SeqNo=3